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ABSTRACT

From the standpoint of intercultural communication, the most serious problem connected with the intercultural transfer of technology is not the fact of technology's continuing expansion, but rather the way in which technology is understood and transmitted to recipient cultures. In its present form, the intercultural transfer of technology implies a model of communication that is descriptively linear and patently asymmetric on the dimension of social influence. A model constructed upon the concepts of convergence and dialogue offers an exciting and competitive alternative to the one grounded in linear causation and target effects. Such a model suggests that for successful communication, a common scheme of interpretation and orientation must be found, one shared by the deliverer of technology and its receiver. It requires the assessment of the relevance of the technology in light of the existing cultural standards of the recipient in order that the implementation of the technology might find a social and cultural space within the existing aspirations and discourse of the recipient society. The recipient nation should question the technology along culturally relevant dimensions of meaning and seek to articulate the range of possible variation with respect to both the potential for reinterpreting the technology and the potential for variation within the local culture. (HOD)

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Intercultural Relevance and Technological Transfer: A Communicative Competence Approach

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I. Introduction

The social and cultural repercussions for recipient cultures of the importation of technology and the accountability of technology exporters to these nations offer important and timely themes for reflection and discussion by scholars from many academic disciplines. There is much that students of human communication can contribute with regard both to the potential cultural impact of technological transfer and to the improvement and coordination of efforts to extend the benefits of technological competence to nations around the world.

Our approach to this topic has taken the form of a gradually maturing research programmatic, which we have entitled 'Assessing Intercultural Relevance and Technological Transfer.' Our main objective in designing this research is the development of an interculturally responsible social science model that integrates cultural values into the communication analysis of the international transfer of technology. The model employs insights generated by the humanities and social sciences for examining communication variables that bear directly upon the delivery and implementation of technical assistance as well as upon the durability of knowledge technologies in recipient cultures.

This paper will summarize the major theoretic tools we are using to specify the research program and outline some of their implications for the conduct of technical assistance projects. The theoretical

model combines the convergence viewpoint upon human communication, particularly as it has recently been argued by Rogers and Kincaid (1981), with a phenomenological and critical sociological perspective which draws upon the work of Alfred Schutz (1964 and 1967) and Jurgen Habermas (1971, 1975, 1979). We contend that this theoretical orientation provides a broad framework of meaning from within which students of human communication can ask relevant questions and formulate the urgent problems.

II. The Concept of Technology

The question of technology should not be interpreted as an aggregate problem stemming from the use of specific technologies or the collection of techniques. In his widely read book La technique ou l'enjou du siecle (Technology: The Stakes of the Century), Jacques Ellul defines technique as a generic phenomenon which characterizes human history from its beginning. (1964:21) Technique is and has been "nothing more than means and the ensemble of means." But even though it is a generic phenomenon, he does not define technique in terms of its precontemporary stages alone.

At an earlier stage in human history, technique was different from technique today. In its present form, technique implies (1) the determination of means on the basis of explicitly rational concepts formulated in the most rationally effective manner, in other words, quantitatively, and (2) the employment of this method of determining means in all of the domains of human existence. In short, technique does not mean specific machines and this or that procedure for attaining an end, but the "totality of methods rationally arrived at

and having absolute efficiency (for a given stage of development) in every field of human activity." (Ellul, 1964)

Technique in the modern world, then, is more than simply technical and industrial apparatus or methods. It is because technique for the modern world involves more than sheer instrumental making that we speak about a science of technique or "technology." In the philosophical sense, technology means methodical and articulated thinking (logos) turned toward production and making (techne) in order to probe their meaning in a rationally comprehensive and practically appropriate manner.

On this point, Manuse Daumas, general editor of the recent work on the history of technology (Histoire generale des techniques), speaks about technology as "a new form of activity...as distinct from both simple applied technique and from science as discovery. Technology lies between science and technique, and is characterized by their interpenetration." (1969:11) Daumas regards the emergence of the new phenomenon of technology as the product of the intimate wedding of science (as theoretical knowing) and technique (as efficacious making); technology is a third domain, wherein science and technique are neither science (pure science) nor simply technique (methodical application), but where they are both and more. As the result, technology has come to mean the unification into a single system of both the methodic and the theoretical means for productive human activity.

To the degree that technology designates this third kind of understanding precisely as the "science of technique," the elements that make technique technological are (1) it is a practice conditioned and promoted by a meaning "logos" of a particular kind, namely, by

theoretical insights exhibiting the formal properties of rational science, and (2) it is a practice, a "techne," that itself conditions and promotes the interests and the substance of this same rational science. Technique becomes technology in that, as distinguished from the kind of technique that either is not involved or involved only to a limited degree with science, technique becomes fused with science in an intimate engendering and conditioning process.

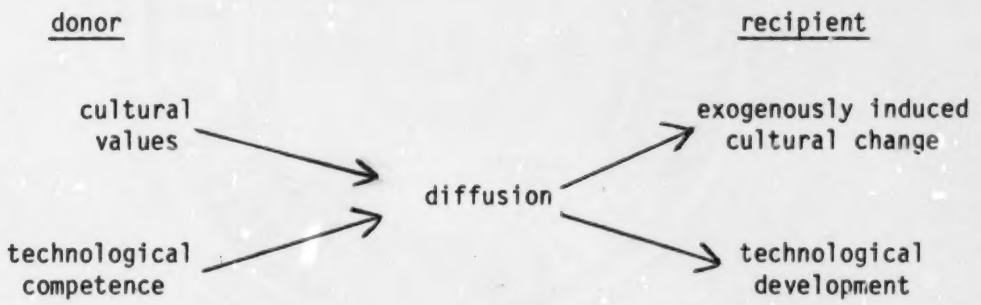
Technology consists of scientific abstraction and power-minded scientific reason articulating and fusing with the performances of making. In the modern world, technology offers itself as a generalized agency or global enabling process that sees itself as both true and efficacious. Therefore, technology is a practical achiever on par with the conceptual accomplishments of theoretical science. This status equivalence obtains most especially in the area of technical assistance, because in this domain the two are tantamount to the same thing. Technology is concrete power subtended by theoretical universality that is not only capable but actually well on the way toward achieving a transformation of the world.

III. Intercultural Communication of Technology

From the standpoint of intercultural communication, the most serious problem connected with the intercultural transfer of technology is not the fact of technology's continuing expansion, but rather the way in which technology is understood and subsequently transmitted to recipient cultures. In other words, as students of human communication, we are not concerned as much with whether technology per se is as destructive to culture as some of its detractors may think, as we are with the communication practices associated with the diffusion

of technology and its mode of social legitimation. The central problem from the standpoint of intercultural communication is that technology's current mode of rational-scientific substantiation generates a style of intercultural delivery and application which in principle is insensitive to culture exigencies and which, consequently, tends to subvert existing cultural meanings and practices.

In its present form, the intercultural transfer of technology implies a model of communication that is descriptively linear and patently asymmetrical on the dimension of social influence. As the following visual schematization illustrates, a power disproportion and an extreme source bias obtain both at the levels of technological knowledge and of cultural meanings.



The implications of this model become clear when we examine how technology is interpreted and communicated across cultures.

Because of its scientific status, technology is thought to be general and abstract and so, as these terms suggest, essentially independent of the historicllly evolved particularist premises of human social interaction. Because technology is rooted in scientific detachment, the value commitments implicit in technology are taken to possess a limitless and universal validity. The scientific generality

of the knowledge associated with technology endows technology with an "objective" appearance, and accordingly encourages the belief that technology represents the paragon mode of knowledge--at once generally true and absolutely efficacious. Technology seems to possess an intrinsic universality to such a degree that the mere presence of technological knowledge in a society allegedly provides a clear indicator of cultural achievement.

Particular cultural values of a society are regarded as limited and dispensible in favor of the demands set for technological knowledge, and these values gradually become subordinated to the rational structures introduced through technological development. The epistemic and pragmatic precedence attributed to technology suggests that technology should be introduced into a culture as soon as minimal material and theoretical preconditions can feasibly be met. Technology appears to have a destiny of its own. These a priori rationalist presuppositions encourage donor nations, specifically the Western world, to believe that the so-called developing nations can be drawn unproblematically into the universalist historiography currently being written by expanding technical culture. This conviction produces the elevation of technological competence, putatively already possessed by donor nations, to an abstract standard against which cultural self-worth as well as all options for social change and progress must be weighed. When interpreted in this manner, technology receives social legitimation as the motor that powers cultural development.

Given the assumption of technological competence on the part of donor nations, these nations tend to adopt a persuasive effects-based strategy toward the diffusion of their technologies around the world.

By appealing to sentiments like progress, material improvement, and a better life, donor nations irresponsibly create expectations in recipient cultures by confounding enhanced technological prowess with normative social arrangements. Although technological change and social change certainly do not occur independently, their relationship is neither linear nor uncomplicated by existing social and cultural meanings. Even though science and technology embody powerful mechanisms for social change, it is manifestly not the case that science and technology alone can secure a better life for individuals, ensure an equitable distribution of the benefits accrued through enhanced material culture, or that they in any way have an unambiguous predictable impact upon already existing social and cultural institutions. To mention only a simple illustration, mass media technology proves equally serviceable in the hands of democrats and dictators alike; radio and television promote open societies, they also protect closed ones. To act on the belief that the mere availability within a society of some instrument, be it a procedure, a technical apparatus, or a scientific formulation, is in and of itself adequate to secure a desired effect in the social environment is an exercise in sheer magic.

Finally, explicit technological mastery contains within itself implicit cultural chauvinism, however benevalent. Cultural intervention through knowledge transfer includes not simply the diffusion of the raw stuff of technical materiél and trained scientists, it also involves the diffusion of culturally specific meanings and historically acquired structured interpretations of reality, which form the motivational basis socially underpinning the

technology. To export technology is to export meaning: to export meaning is to export culture and history.

This latter inference has not been lost on developing nations. To paraphrase Nkrumah (1973:207, 13), Europeans insist that "Africa ... entered history only as the result of European contact." "We are," he writes, "treated as objects rather than as subjects." "Whereas other continents have shaped history and determined its course, Africa has stood still, held down by inertia." As long as the standards of development continue to be set unilaterally by the 'developed' nations, the difference will persist between the nations that 'have arrived' and those that are perpetually 'on the way.' For the underlying anthropological assumptions of either a single set of criteria for cultural achievement or of parallel courses of cultural development are equally untenable.

IV. Cultural Relevance & Communicative Competence:

A Convergence Model

In recent years, scholars working in the area of development research have become increasingly sensitive to the continued use of Western theoretical paradigms in intercultural investigations. Many scholars seem to concur with one of the leading scholars in the field of development, Everett Rogers (1974:31), who observes that "as definitions of development, and actual development programs, stress equality of distribution, popular participation in decentralized activities, self-development, etc., the concepts and methods of diffusion inquiry, must change appropriately."

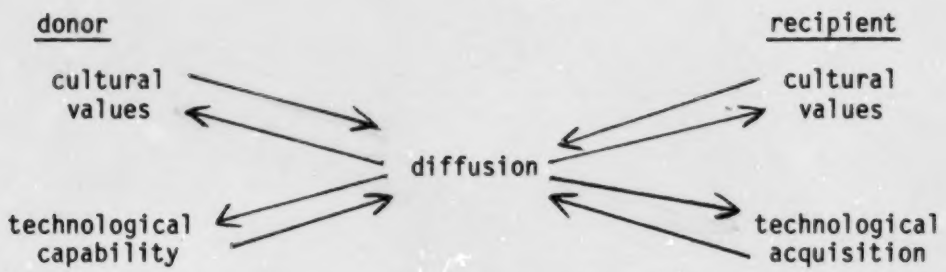
Rogers (1978:68) summarizes the newer conceptions of development:

> A widely participatory process of social change in a society intended to bring about both social and material advancement (including greater equality, freedom, and other valued qualities) for the majority of the people through their gaining greater control over their environment.

Rogers refers to participation, equality, and freedom as essential values within contemporary development theory and research.

If we can agree that development programs presuppose these values, then the question becomes how can technical assistance projects contribute to their realization? These values are not to be regarded simply as the goals of diffusion as a variety of social outcomes brought about by technological interventions, but rather need to be integrated into the communication transactions underpinning the process of international knowledge exchange. Freedom, equality, and social participation comprise social structural and relational communication variables which imply reciprocalness and mutual understanding among individual social actors as distinguished from aggregate isolated instances of intraindividual influence attempts.

Such values as these can only be shared, they cannot be endowed. The premise of this paper is that a model for the intercultural communication of technology constructed upon the concepts of convergence and dialogue offers an exciting and competitive alternative to the one grounded in linear causation and target effects. As the following visual summary illustrates, this relational approach to intercultural communication of technology appears more complicated, and hopefully more rich, than the linear asymmetric orientation. The remainder of this paper will be devoted to discussion of this model.



Technological assistance influences the symbolic expressions through which people structure their social and cultural world. A people's customs, ethics, values, and artistic expressions are affected by technological intervention. Moreover, technology carries its own cultural system of relevances. A system of relevances provides the framework of meaning in terms of which people view themselves and interpret others. The delivery of technological implements and knowledge across cultural boundaries is therefore an intermixing of cultures. The recipient of the technological input is also a recipient of 'foreign' cultural values embedded in the technology itself.

Successful dissemination and implementation of technological knowledge within the international community depends upon competent intercultural communication. Competent intercultural communication on the part of the delivers of technical assistance requires not only the thorough assessment of the material and social needs of a developing nation but also a sophisticated understanding of the symbolic cultural structures that determine the recipient nation's manner of evaluating and interpreting the acquired technology.

Specifically, the continued effectiveness of technological assistance requires a reasoned assessment of the value components operating within the culture for the sake of establishing a novel technology's congruence with the culturally specific criteria of relevance. In turn, determining the relevance of technical information

presuppoeses an intercultural dialogue directly addressing the value and ethical componenets of all partners participating in the information exchange. Through this focused dialogue emerges the potential for the adjustment of the technical input in accordance with the enduring cultural norms of relevance and acceptableness already existing in the culture.

Intercultural communicative competence requires that (1) the system of relevance assumed by technologies must be disclosed and clarified, and (2) intercultural relevance must be explored if technological transfer is to respect the cultural integrity of developing nations.

Every cultural being lives within a scheme of interpretation and orientation incorporated into a system of relevance. Every consequential decision people encounter brings them face to face with what is relevant to him or to her. The questions of whether and how a technology is to be introduced into one's own culture as well as the questions of whether and by what methods one should introduce a technology into another culture require reflection informed by knowledge about relevant variables of intercultural communication and of cultural value selection. For human science to act responsibly within the world community it serves, we must be able to determine how cultural presuppositions about relevance influence the process of technological transfer and how relevance functions within the theories and models ordinarily employed for the social interpretation of technological intervention.

The concept of 'relevance' designates the composite of values, their interconnectedness and the functional unity they express within a

society. Relevance is what matters to a specific sociocultural group and forms part of a network of 'all that matters' to it, including the history of the group's past commitments. A system of relevance exists at every historical moment and is part of a peoples social heritage, transmitted through their specific educational process to all its members. (Natanson, 1970:99) Relevance functions:

> (1) to determine what facts, events or problems are to be treated with equal or unequal value.
>
> (2) as both a scheme of interpretation and as a scheme of orientation for each member of a group, constituting patterns of meaningful conduct and discourse. (Schutz, 1964)

As communicators, we can be responsive and responsible to another culture only if we come to understand our own system of relevances as they have been identified and articulated by the human and social sciences and only if we understand how, in turn, the human and social sciences influence or identify the system of relevances representative of another culture. Moreover, we can only communicate competently with another culture if we understand how the relevance embodied in technology and theories about technological development and assistance is meaningful, evaluated, and functional in another culture which is the intended recipient of the technological input. The possibility for successful intercultural communication rests upon establishing the congruence of pertinent relevances. This means that a common scheme of interpretation and orientation must be found, one shared by the deliverer of a technology and its receiver. In order to communicate competently with the recipient culture, genuine intercultural relevance is not only a necessary condition for successful communication but must

be built into the theoretical and methodological criteria governing intercultural inquiry and development. Finally, intercultural relevance as a criterion of inquiry and of communication can enhance the viability of technological transfer in the international community.[1]

Technology in itself does not have to represent an irresistable force for the undermining of cultural values, but its present abstract reified power status leads to serious disruptions within cultural systems. Therefore, the most reasonable approach to the 'problem' of technology and how it can be diffused to other cultures in the least disruptive way requires the assessment of the relevance of the technology in light of the existing cultural standards of the recipient in order that the implementation of the technology might find a social and cultural space within the existing aspirations and discourse of the recipient society. Accomplishing this task requires employing a comparative methodology possessing sufficiently differentiated concepts so that it becomes possible to assess the <u>meaning</u> of the technology within the relevance framework of the recipient culture's values and aims.

Too often, the method used to evaluate the social influence of exported technology has been commensurate only with the structural imperatives set by the technology itself. This method merely assayed the theoretically normalized empirical indicators of societal development in order to predict a technology's probable impact. Therefore, cultural projections were advanced on a rational trajectory set off against a base-line of culturally neutral theoretical indices.[2]

In contrast, if we envision technology diffusion as a communication process taking the form of an exchange of meanings between partners in a genuine dialogue, we must suppose that both participants equally possess credentials to negotiate the particulars of possible agreement in terms of their respective frames of relevance. The dialogue embraces the competencies of the participants, a problem of reference, and a domain of indetermination.

In the case of technological transfer, the problem of reference, initially at least, is the specific technology in question. But the domain of indetermination and so the possiblity for the construction of shared meaning only begins to emerge clearly when the technology in question is understood by both the donor and the recipient as disruptive in principle (as an agency of change). Given the specific cultural understandings of the meaning of "change" within the two cultures, the problem of reference will stimulate the exploration and disclosive deployment of possible interpretations and of motivations on the part of each culture. Each partner brings something to the dialogue that is otherwise inaccessible to the other, and each culture takes something away with it from the dialogue that it did not possess before entering into the exchange [3]

This convergence approach via the dialogue points up an additional variable that is crucial from the standpoint of the intercultural communication of technology: the meaning of disruption will be perceived quite differently from the two focal points of the dyad. Typically, the donor will take for granted the specific meanings embodied in the technology and direct attention to the likely modifications required of the recipient culture in order for the

technology's successful implementation. In other words, the donor will regard 'disruption' as the effect of the novel technology and anticipate some measure of 'change' in the values, economic institutions, or social organization of the recipient. The recipient culture, on the other hand, will regard the technology as 'disruptive' and, treating it as a cause, will interpret this novelty as a problem which requires manipulation in order to minimize its interruption of the social process. In either case, presupposed cultural values are concretely relativized and brought explicity into play as possible avenues for reaching a shared understanding about the problem of reference. The participants share information and priorities with one another for the sake of realizing some mutual understanding about a common purpose.

The recipient nation will question the technology along culturally relevant dimensions of meaning and, through this process, seek to articulate the range of possible variation both with respect to the potential for reinterpreting the technology and with respect to the potential for variation within the local culture. The recipient culture, thereby, contributes significantly to the definition of the problem and the search for the solution containing the proportionately greatest reduction in potential for disrupting the cultural system.[4] In any instance, communicative symmetry is maintained and the recipient culture retains the prerogative to fashion for itself and on the basis of its own aspirations its abiding character as a culturally differentiated association of human beings sharing a common system of relevance.

To a much greater extent than is usually acknowledged, the burden of choice, and therefore of self-aware responsible selection, is placed upon the recipient culture. This situation, aside from preparing a way for rational and culturally valid social planning--a problem of legitimation--, dramatically reduces the degree of control that the donor culture can legitimately claim over the meaning of the technology. The upshot is a net reduction in the power dimension of the relationship, and the attenuation of the top-down communication structure which too often accompanies developmental assistance projects.

Notes

[1] The imperative for communicative competence based upon an understanding of the relevance structure of the recipient culture's social reality has been impressed upon me by a colleague who teaches at the International University of Japan. He writes: "Technological transfer from one culture to another imposes by necessity the deliverer's sense of relevance and values on those of the recipient, triggering a lopsided development and social decay unless the deliverer is well informed and aware of the recipient's scheme of relevance and values and cooperates according to the latter. The planner and practitioner of technological transfer, therefore, must be able to assess the recipient's articulation of values, meaning structures and customs. It essentially involves an explication of the recipient's social reality...Only when we understand fully the recipient's social reality, can we begin to introduce technology appropriate to the recipient. If we are hastened to apply certain technology without a full grasp of such social reality, we are only bound to be one-sided or accused of a dubious motive in doing so." Dr. Kazuhiko Okuda, personal correspondence, May, 1983.

[2] One important implication of this redefinition of the communication relationship between the donor and the recipient involves the re-evaluation of the role that 'needs' play in developmental assistance projects. Typically, needs are taken to represent objectively occurring insufficiences that can be identified empirically on the basis of culturally neutral socio-economic analytic frameworks. In fact, needs-assessment technologies are imported into developing nations and employed on the basis of pre-established, principally Western, assumptions about social and cultural well-being. In contrast, from the standpoint of the phenomenology of social relevance, 'needs' constitute culturally specific symbolic organizing functions that select the historical aspirations of social actors by establishing a temporal structure which is composed of expectations differentially attuned to the range of available social futures, and thereby manages the significative complexity of the present in relation to the past. Needs do not exist in a socio-cultural vacuum: they embody relevance structures rooted in social processes that link the future with the past. As part of a cultural dialogue, 'needs' can be employed by recipient nations to assert culturally specific boundary-maintenance functions enabling the recipient culture to particularize the range of possible social and technical futures in a relevant way. Given cultural diversity, there is no a priori reason for supposing that 'needs' as identified by the donor and the 'needs' of the recipient are compatible. In short, 'need' must be negotiated and communicatively constructed rather than assumed to be factual and empirical.

[3] The 'dialogue' we have in mind presupposes parity in a strict sense, and entails that donor nations relinquish theoretical and interpretative domination as well as practical control of their technologies. Only by this repudiation of cultural superiority can

diffusion concepts and research shed their linear bias. The terms of convergence are set equally by donor and recipient alike. For example, as F. Okuthe-Oyugi, A. O. Mojola, and G. P. Mwagiru have expressed to me in a joint letter: "In view of the continuing mass poverty in the Third World inspite of massive transfer of technology, it is necessary to radically re-examine the role and function of Western technology in the so-called developing world...We found the existing models inadequate and unfavourable to the Third World because of their ethnocentric bias. We feel that they promote the interests of developed countries and create technological dependence resulting in the cultivation of "cultural inferiority". In addition, the speed of technological and accompanying cultural change leaves the majority of us disoriented. Most of the technological and resultant cultural innovations leaves out the larger part of the population. It is an axiom that technological domination leads to cultural domination and the result is unequality of exchange that is the basis of the viscious cycle of underdevelopment. In the context of (the re-examination of existing diffusion models) it will be necessary to pose such fundamental questions as : (1) Why technology? (2) Why the technological transfer? and (3) Who determines the form and content of the technological transfer, i.e., what should be the terms of the transfer, and what role should "indigenous" technology play?" University of Nairobi, May, 1983.

[4] The concept of intercultural relevance supplies the methodological justificaton for the development of participatory/action research. Participatory research attempts to avoid the situation in which researchers gather information from a population for purposes that are not disclosed or are unintelligible to the population. Participatory research starts with the recognition that a community knows best their own situation and requires that the research be ratified as having value to the life-situation of the community. In order to spur meaningful development, the principle of popular participation must be socially and culturally particularized so that the population can be drawn into the process of inquiry and assessment. The notion of "action research" acknowledges social action as a legitimate component within the research design and seeks to empower the community by assisting it with articulating and comprehending the relevance structures underlying the meaning and unity of the social action-environment. Participatory research includes at least the following aspects: (1) it is a learning model helping to create a shared awareness of existing social reality, (2) an awareness of need and development grows out from the community's recognition of problems, (3) community development hinges upon interaction between the community and social members fulfilling research roles, allowing the community to recognize and act upon its own resources, (4) social equality creates a favorable climate for training and participation serving indigenous social aims, and, (5) participatory research contributes to the realizaton of social and economic equality. (See Swantz and Rahman, 1978) Research, then, becomes integrated into the development program based upon a partnership of research/researched which is realized through the gradual coordination of pertinent relevances.

References

Daumas, Manuse, History of Technology and Invention: Progress Through the Ages, vols. I & II, E. Hennessey, trans., (New York: Crown Publishers, 1969)

Ellul, Jacques, The Technological Society, (New York, 1964)

Habermas, Jurgen, Knowledge and Human Interests, (Boston: Beacon Press, 1971)

, Legitimation Crisis, (Boston: Beacon Press, 1975)

, Communication and the Evolution of Society, (Boston: Beacon Press, 1979)

Natanson, Maurice, The Journeying Self: A Study in Philosophy and Social Role, (Reading: Addison-Wesley, 1970)

Nkrumah, Kwame, Revolutionary Path, (London: Panaf Books, 1973)

Rogers, Everette, "Innovation in Organizations. New Research Approahces," (Presented to the American Political Science Association, San Francisco, September 2-5, 1975)

"The Rise and Fall of the Dominant Paradigm" in Journal of Communication, Winter (1978), vol. 28

and Kincaid, D. Lawrence, Communication Networks: Toward a New Research Paradigm, (New York: The Free Press, 1981)

Schutz, Alfred, "Equality and the Meaning Structure of the Social World" in Collected Paper II: Studies in Social Theory, E. A. Bronderson, ed., (The Hague: Martinus Nijhoff, 1964), 226-273

, The Phenomenology of the Social World, G. Walsh and F. Lehnert, trans., (Evanston: Northwestern University Press, 1967)

Swantz, Marya-Liisa and Rahman, Anisur, Assignment Children, Number 41, January/March, 1978